

Overview of a Foreign Animal Disease Response Nebraska Department of Agriculture

June 3, 2008

This serves as a brief description of the Nebraska Department of Agriculture's role in animal health and disease control in a foreign animal disease outbreak. The purpose is to continue to foster a cooperative relationship between local, state, and federal emergency management and encourage communication between agencies.

The unusual aspect of an emergency response in a foreign animal disease outbreak is that the State Veterinarian's office receives first notification. The response is initiated by the state animal health authorities, rather than local authorities requesting support from the state. Due to the technical expertise needed and the international scope of consequences, the event quickly involves multiple agencies. It is expected to quickly escalate to implement the Multi-Agency Coordination System.

As a reminder, there are several resources available at the Nebraska Department of Agriculture's web site at www.agr.ne.gov. Click on the Homeland Security blue button at the bottom of the home page, and scroll down to access the State's Emergency Operation Plan for Agriculture, **Emergency Support Function (ESF) #11**, and four monographs. The four monographs especially written to guide local emergency management are:

 **Monograph No. 001 - Traffic Control Agricultural Response**

 **Monograph No. 002 - Catastrophic Mortality Disposal**

 **Monograph No. 003 - Temporary Housing and Care for Livestock and Poultry**

 **Monograph No. 004 - Decontamination and Disinfection**

The Nebraska Department of Agriculture (NDA) and United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Veterinary Services (VS) form a unified command with responsibility and authority for animal health and animal disease. The unified command also includes local emergency management and other state agencies. The Foreign Animal Disease Diagnostician (FADD) becomes the Incident Commander. NDA has implemented and exercised its Incident Command System. Decisions on animal disease control, such as areas of livestock quarantine, and timing/method of livestock depopulation, will be made by specially trained animal health officials. Decisions involving the utilization and coordination of local resources are made by local emergency management.

The event begins with a report to the State Veterinarian, Dr. Dennis Hughes, or the USDA/APHIS Area Veterinarian-in-Charge (AVIC), Dr. Kathleen Akin. The report is prompted by the recognition of sick livestock showing signs of a potential foreign animal

disease. A state or federal FADD will be dispatched to investigate and collect samples for diagnosis. If the clinical signs are highly suspicious of a foreign animal disease, the Nebraska Emergency Management Agency (NEMA) will be contacted and may assist in emergency transport of the diagnostic samples to the USDA laboratory. Also, if the situation is highly suspicious of a foreign animal disease, NEMA will be contacting local emergency management to begin preparations. Depending on the circumstances, local officials may decide to open their Emergency Operations Center.

The first step is recognition of the disease. The next steps involve containment and eradication. A foreign animal disease outbreak is likely to involve multiple herds. The response is expected to necessitate a large quarantine area such as one or more counties and strict biosecurity measures to prevent the spread of the disease.

The livestock quarantine issued by NDA and enforced by local law enforcement will prevent the movement of animals that could be carriers or could be infected. Once the disease is confirmed by the laboratory, the Governor will be asked to issue an Emergency Declaration. This declaration may occur before a local emergency is declared. The Governor's Emergency Declaration will make emergency funds available, and may specify directives which supersede some laws and regulations. For example, to prevent the spread of the disease, law enforcement may be given the power to restrict human movement in and out of the quarantine zone. The Governor may issue a "Stop Movement Order" to include all animals in transit within a wide geographic area. This may be like the grounding of airplanes at 9/11, until the investigation clarifies the extent of the infection and determines which animals can safely move. Although Foot-and-Mouth Virus, for example, causes disease in "cloven hoofed" animals, horses and other animals may carry the virus on them, so all animals may be under a "Stop Movement Order" for a time. It is expected that our neighboring states will close their borders to livestock entering from Nebraska. Care and shelter will be required for some animals in transit that must be temporarily unloaded. State and federal wildlife officials will minimize the spread of disease by wildlife.

Access points will be identified to allow people to leave a quarantine zone without spreading the disease (for example, ask them to wear freshly laundered clothes and disinfect footwear as they exit the zone). Cleaning and disinfection facilities will need to be located at these access points. Due to the time consuming effort to clean and disinfect vehicles, vehicular traffic in and out of the quarantine zone should be severely limited. All responders who could potentially be contaminated by the disease causing organism will need to take special precautions not to contaminate other areas or other livestock, even if still within the quarantine zone. This is like being splattered by wet paint while painting the living room, and avoiding the transfer of the wet paint elsewhere. Care is taken to avoid transfer of the wet paint both inside and outside the house. Some level of protective clothing will be necessary. That may consist of washable or disposable coveralls and boots which can be thrown away, or cleaned and disinfected. The local, state and even the federal government will run short of "clean" responders, so our personnel will need to be utilized efficiently.

NDA has trained the Livestock Emergency Disease Response System (LEDRS) Veterinary Corps to assist in a foreign animal disease outbreak. These volunteers comprise a portion of the personnel surge capacity. They are considered a state resource under the direction of NDA. If deployed, they would report to a staging area where NDA would assemble them into animal health teams, provide an assignment and location of operation.

One of the many phases of the operation where the LEDRS Veterinary Corps may contribute involves tracing of potentially exposed animals from contact or linked premises. A contact premises would include farms/ranches/facilities adjacent to infected herds. Linked premises would include farms/ranches/facilities identified as linked by animal or animal product movement from an infected herd. These would also include premises which could have been exposed to contaminated equipment, vehicles or even contaminated people. This investigation involving traceback and trace forward will take time. The premises registration program will make this task easier.

USDA can also provide additional trained federal responders. The National Animal Health Emergency Response Corps (NAHERC) can be deployed on short notice. There is concern that if Nebraska is not the first site of infection, NAHERC responders may already be deployed elsewhere.

The eradication of a foreign animal disease necessitates the depopulation of infected and exposed susceptible livestock. A strict protocol needs to be followed for livestock owners to be eligible for indemnity from USDA for livestock depopulated as part of the emergency response. The protocol involves an appraisal based on fair market value, and agreed upon by the owner prior to euthanasia. USDA representatives will conduct the appraisals. Owners will not be reimbursed for animals that have succumbed to the disease. It is in the owner's best interest to report sick animals as soon as possible. Depopulation will be carried out by trained responders in a humane manner.

There are several possible methods of carcass disposal. In most areas of Nebraska, burial will be the method of choice. The Nebraska Department of Environmental Quality (DEQ) and other environmental authorities will provide guidance on environmentally sound burial locations. Some counties and some production facilities may have predetermined burial locations identified on site. DEQ may have guided the choice of that location. The transportation of infected carcasses risks further contamination. If transportation is necessary, it requires intense biosecurity measures. Other methods of disposal such as incineration and composting will also need to be considered. Besides cleaning and disinfection, most viruses, such as the Foot-and-Mouth Virus, are killed by heat, drying, and a change in pH. The virus dies as a carcass decomposes, so temporary burial with relocation later once the virus is no longer a threat, may be another option considered.

The lifting of quarantines by NDA and USDA would be **after** depopulation of affected animals, proper disposal of organic material, thorough cleaning and disinfection of contaminated buildings and equipment, a period of time for heat and dryness to destroy

virus in the environment, environmental testing for virus, and the monitoring of sentinel animals placed on the farm. Unnecessary delay must be avoided for the community and the nation to get back to normal activities.

It is important to understand that the State Joint Information Center (JIC) would be activated very early to provide consistent messages, credible information, and support in a real event. Partnering with the State JIC and sharing information will assure consistent public information and rumor control. It is important that local emergency management is able to communicate the message to their community. The State JIC will assist with the development of scientifically correct technical messages. Methods of enhanced biosecurity must be explained to producers. Public confidence in government and consumer confidence in the food supply must be maintained. Press releases, media interviews, cooperation with local public information officers, and a special dedicated web site will be utilized at the state level to provide the most current public information. This situation will be fluid, including rapidly changing quarantine zones, as the situation progresses.

In a foreign animal disease outbreak, there will be significant economic loss. Producers will suffer financially due to lack of production. Allied businesses will suffer losses due to the ripple effect. Unemployment will be high, mortgages will be foreclosed, customers will be lost forever, and most everyone will be affected in some way. Stress on whole communities will be unavoidable. Although USDA has disaster assistance programs to help with financial challenges, the mental health of communities cannot be ignored. Behavioral health counseling, as part of public health, will be a significant component of any recovery effort. The Foot-and-Mouth Virus is not a public health concern, but some other foreign animal diseases are. The public will need appropriate information.

Local emergency management has a crucial role in this emergency response. The Nebraska Department of Agriculture is looking forward to more discussion to enhance our coordination. You are most familiar with your local resources. As with other emergencies your initial response may include conducting an inventory of local resources such as:

- Maps of the region
- Potential staging areas (to include hotel/housing for 200+ agricultural responders, restaurants or food service, an open warehouse of 5,000+ sq ft to store equipment, PPE, supplies)
- Road signage for stopping and rerouting traffic
- Heavy equipment to facilitate burial of carcasses and organic material
- Fire fighting-HAZMAT equipment and personnel to assist cleaning and disinfection
- Facility for an area command to include communication capability
- Truck washes
- Rubber boot supplier
- Laundromat facilities
- Voluntary organizations that may be asked to provide food, water, and mobile sanitary facilities for responders

- Location of livestock, especially large confined feeding operations (CAFOs)
- Weather information including wind direction
- Consumables such as gasoline

Other state resources will also support this effort.

The Nebraska Department of Agriculture, the veterinary profession and agricultural producers appreciate the importance of food and agriculture to our state's economy. A livestock disease emergency could have devastating economic and social consequences. The Department works with federal, state, and local partners, as well as Nebraska's neighboring states to plan and execute a coordinated livestock emergency disease response. Please feel free to contact me if I can be of any assistance or provide any further information.

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